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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/429,339	10/28/1999	ALAN L. DAVIS	TI-28475	5805

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EXAMINER

KENDALL, CHUCK O

ART UNIT PAPER NUMBER

2122

DATE MAILED: 01/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/429,339

Applicant(s)

ALLAN L. DAVIS

Examiner

Chuck O Kendall

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. This action is in response to the application filed 10/28/99

Claims 1-27 have been examined.

- 2.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-27 rejected under 35 U.S.C. 102(b) as being anticipated by Robinson et al
USPN 5,524,244 hereinafter Robinson.

Claim 1.

Robinson, anticipates A translation system, comprising:

a front end for identifying source elements in a source file; and [Robinson, *Abstract* see
Functional Block cell]

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a back end for generating a translation file having translation elements corresponding to translation of said identified source elements and having an interface for receiving inputs for modifying said translation. [Robinson, 4:12-20, also see *Abstract* Graphic entry].

Claim 2.

The system of Claim 1, wherein the source file is for a source device and the translation file is for a disparate target device. [Robinson, 4:12-20, see Signal processor and Host microprocessor]

Claim 3.

The system of Claim 1, wherein the source file is a linear assembly file for a target device and the translation file is a scheduled assembly file for that device. [Robinson, Abstract, see scheduler/compiler]

Claim 4.

The system of Claim 1, wherein the source file is an assembly language file. [Robinson 59:23-33, see primitive block and signal processing functions]

Claim 5.

The system of Claim 4, wherein the translation file is an assembly language file. [Robinson 59:65-67, for assembly lines]

Claim 6.

The system of Claim 1, wherein said translation is a context-dependent translation based on static analysis of the source file. [Robinson 61: 20-27, also see 79: 10-15, for global static variables.]

Claim 7.

The system of Claim 1, wherein the back end further comprises:

a translator for performing a context-dependent translation, the translator comprising:

a translation machine description for mapping source opcodes to target opcodes; [Robinson, see table on column 66 for opcode instructions and operands/opcodes]

a source machine description containing a description of source opcodes and source operands in a generic representation; [Robinson, see table on column 66 for opcode instructions and operands/opcodes]

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a target machine description containing a description of target opcodes and target operands in a generic representation; and [Robinson, see table on column 66 & 68 for opcode instructions and operands/opcodes]

wherein the translator receives a source instruction from said front end, utilizes the translation machine description and source machine description and target machine description to translate source elements into target elements. [Robinson see *Abstract* for Signal processor and Host microprocessing as interpreted from prior art, "equivalent function"]

Claim 8.

The system of Claim 7, wherein the proper target opcode is chosen from a group of potential target opcodes by comparing the target opcode and target operand with the source opcode and source operand. [Robinson, table on col. 66 discloses a source compare operand, see table]

Claim 9.

The system of Claim 7, wherein two or more source opcodes can be combined to a single target opcode when there is a target opcode that represents the two or more source code opcodes. [see table for {and opcode} as interpreted]

Claim 10.

The system of Claim 1, wherein the user interface is a graphical user interface. [Robinson 4: 35-40, for GUI]

Claim 11.

The system of Claim 10, wherein the graphical user interface displays at least a portion of the source elements in a source window, at least a portion of the translation elements in a translation window, and the source and translation windows are displayed side-by-side. [Robinson, 53:1-25 see display format and monitor and modify]

Claim 12.

The system of Claim 11, wherein corresponding groups of elements of the source and translation files are aligned in the source and translation windows. [Robinson, 53:1-25 see monitor and display]

Claim 13.

The system of Claim 11, wherein at least one of the source and translation windows is operable to display a status icon for an element in the window.

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[Robinson, 36:55-67 – 37:1-15, see cells, icons, graphical display, also see resource usage which examiners deems to be synonymous to the status feature from application]

Claim 14.

Robinson, Anticipates A method for performing translation comprising:
receiving a source file; [Abstract]
identifying source elements in the source file; [Abstract, see compiler/scheduler, by definition compilers parse and identify source elements]
generating a translation file having translation elements by performing a context-dependent translation of the source elements; [4:12-20]
displaying the translation elements in an interface for receiving user inputs; and [4:12-20]
in response to user inputs, automatically regenerating selected translation elements based on the user inputs. [4:12-20, also see abstract]

Claim 15.

The method of Claim 14, wherein the source file is for a source device and the translation file is for a disparate target device. [Robinson, 4:12-20, see Signal processor and Host microprocessor]

Claim 16.

The method of Claim 14, wherein the source file is a linear assembly file for a target device and the translation file is a scheduled assembly file for said target device. [Robinson, Abstract, see scheduler/compiler]

Claim 17.

The method of Claim 14, wherein the source file is an assembly language file. [Robinson 59:23-33, see primitive block and signal processing functions]

Claim 18.

The method of Claim 17, wherein the translation file is an assembly language file. .
[Robinson 59:65-67, for assembly lines]

Claim 19.

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The method of Claim 14, further comprising: performing static analysis of the source elements in the source file; and performing context-dependent translation of the source elements based on the static analysis. [Robinson 61: 20-27, also see 79: 10-15, for global static variables.]

Claim 20.

The method of Claim 14, wherein the step of generating a translation file further comprises: converting an opcode of a source machine to an opcode of a translation machine file by comparing the source opcode to possible translation opcodes; [Robinson, table on col. 66 discloses a source compare operand, see table]

converting the operand of the source opcode by comparing an operand of the source opcode in a generic expression with generic expression for a translation operand; [Robinson, table on col. 66 discloses a source compare operand, see table]

combining the translation opcode and the translation operand to form a translation. [Robinson, see table for {and opcode} as interpreted]

Claim 21.

The method of Claim 20, wherein the step of converting an opcode of the source file further comprises choosing a translation opcode from a group of potential translation opcodes by comparing the translation opcode and translation operand with the source opcode and source operand. [Robinson, table on col. 66 & 68 discloses a source compare operand, see table]

Claim 22.

The method of Claim 20, wherein the step of converting the source opcode further comprises the step of combining two or more source opcodes into a single translation opcode when there is a translation opcode that represents the two or more source opcodes. [Robinson, table on col. 66 discloses a source compare operand, see table]

Claim 23.

The method of Claim 14, wherein the user interface is a graphical user interface. [Robinson 4: 35-40, for GUI]

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Claim 24.

The method of Claim 23, further comprising:

displaying the source elements in a source window; displaying the translation elements in a translation window; and displaying the source and translation windows side-by-side in the graphical user interface. [Robinson, 53:1-25 see display format and monitor and modify]

Claim 25.

The method of Claim 24, further comprising aligning corresponding groups of elements of the source and translation files in the source and translation windows. [Robinson, 53:1-25 see monitor and display]

Claim 26.

The method of Claim 24, further comprising displaying a status icon for an element in at least one of the source and translation windows. [Robinson, 36:55-67 – 37:1-15, see cells, icons, graphical display, also see resource usage which examiners deems to be synonymous to the status feature from application]

Claim 27.

Robinson, anticipates, A translation system, comprising: a computer capable of executing a program, and an interactive program for translating code for a first processor into code for a second processor and capable of being executed on said computer. [Robinson, see Abstract]

Correspondence Information

Any inquires concerning this communication or earlier communications from the examiner should be directed to Chuck O. Kendall who may be reached via telephone at (703) 308-6608. The examiner can normally be reached Monday through Friday between 8:00 A.M. and 5:00 P.M. est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Greg Moore* can be reached at (703) 308-4789.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

For facsimile (fax) send to 703-7467239 official and 703-7467240 draft

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